



Let's Talk About Children and Stroke

Even though it's considered an older person's disease, stroke is a potential risk for everyone, including children. If your

child has any of the warning signs of stroke, call 9-1-1 or go to a hospital emergency department right away.

What causes ischemic stroke in children?

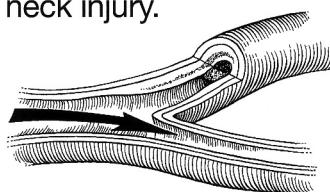
Finding the cause of a stroke is vital to providing the right treatment and preventing more injury. Doctors can find a cause in about two-thirds of the cases.

The most common cause of ischemic strokes is that a blood clot forms in the heart and travels to the brain. This can be caused by congenital heart problems such as abnormal valves or infections. In these cases children may need surgery or antibiotics.

Sickle cell disease is a blood disorder that's associated with ischemic stroke. In sickle cell disease, the blood cell can't carry oxygen to the brain, and blood vessels leading to the

brain may have narrowed or closed. About 10 percent of children with sickle cell disease suffer a stroke. There is a high risk of repeat strokes, but this can be reduced by blood transfusion.

Finally, ischemic strokes can be caused by trauma that injures large arteries and causes a loss of blood flow. For instance, a large artery might be injured when a child has a neck injury.



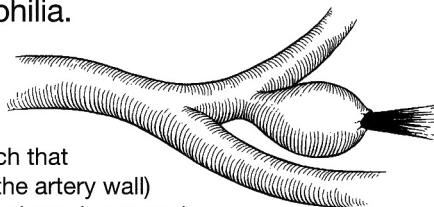
Blood flows through a branching artery, but a clot has formed in the narrowed top branch, stopping blood flow. Strokes caused by clots are ischemic strokes.

What causes hemorrhagic stroke in children?

When a blood vessel on or in the brain ruptures, blood flows into brain areas where it's not supposed to go. It may pool in brain tissues, resulting in a blood clot. Also, because the vessel is ruptured, blood isn't transported where it should go. As a result, the brain is deprived of oxygen, and this may lead to permanent brain injury. Hemorrhagic strokes are most often caused by rupturing or weakened or malformed arteries known as

AVMs (arteriovenous malformations). The risk of hemorrhage is higher with certain illnesses such as hemophilia.

If an artery wall is weak, an aneurysm (a blood-filled pouch that balloons out from the artery wall) may form at the weakened spot and rupture (hemorrhage). Strokes caused by bleeding are hemorrhagic strokes.



Will my child get better?

Recovery from stroke is different with each child. Prompt medical treatment and rehabilitation therapy can maximize recovery. In general, most younger people will recover

more abilities than older people. Children often recover the use of their arms and legs and their ability to speak after a stroke.

What are the effects of stroke in children?

The effects of stroke in a child are generally the same as in an adult. The most common effects are:

- **Hemiparesis**, weakness on one side of the body, or **hemiplegia**, paralysis on one side of the body.
- **One-sided neglect (unilateral neglect)**, which causes the stroke survivor to ignore or forget their weaker side.
- **Aphasia**, difficulty with speech and

language, or **dysphagia**, trouble swallowing.

- **Decreased field of vision** and trouble with visual perception.
- **Loss of emotional control** and changes in mood.
- **Cognitive changes** or problems with memory, judgment and problem-solving.
- **Behavior changes** or personality changes, improper language or actions.

How can I learn more?

- Talk to your doctor, nurse or other healthcare professionals. Ask about other stroke topics. This is one of many *Let's Talk About Stroke* fact sheets available.
- For more information on stroke, or to receive additional fact sheets, call the American Stroke Association at 1-888-4-STROKE (1-888-478-7653) or visit us online at StrokeAssociation.org.
- If you or someone you know has had a stroke, call the American

Stroke Association's "Warmline" at 1-888-4-STROKE (1-888-478-7653), and:

- ✓ Speak with other stroke survivors and caregivers, trained to answer your questions and offer support
- ✓ Get information on stroke support groups in your area
- ✓ Sign up to get *Stroke Connection Magazine*, a free publication for stroke survivors and caregivers

What are the Warning Signs of Stroke?

- ⌚ **Sudden weakness or numbness of the face, arm or leg, especially on one side of the body**
- 🧠 **Sudden confusion, trouble speaking or understanding**
- 👀 **Sudden trouble seeing in one or both eyes**
- 走路 **Sudden trouble walking, dizziness, loss of balance or coordination**
- 头痛 **Sudden, severe headaches with no known cause**



Learn to recognize a stroke.
Because time lost is brain lost.

Today there are treatments that can reduce the risk of damage from the most common type of stroke, but only if you get help quickly – within 3 hours of your first symptoms.

Call 9-1-1 immediately if you experience these warning signs!

Do you have questions for your doctor or nurse?

Take a few minutes to write your own questions for the next time you see your healthcare provider:

Are the tests harmful to my child?

How important are the medicines to be taken?

What can be done to prevent another stroke?

The statistics in this kit were up to date at publication. For the latest statistics, see the Heart Disease and Stroke Statistics Update at americanheart.org/statistics.

The American Stroke Association is a division of the American Heart Association. Your contributions will support research and educational programs that help reduce disability and death from stroke.

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